

JOHNSON COUNTY RESOURCE ENHANCEMENT AND PROTECTION PLAN 1990-1995
PREPARED BY
JOHNSON COUNTY RESOURCE ENHANCEMENT AND PROTECTION COMMITTEE
JUNE, 1990

THE PREPARATION OF A FIVE YEAR RESOURCE ENHANCEMENT AND PROTECTION PLAN AND A ONE YEAR PROPOSED EXPENDITURE PLAN IS REQUIRED BY EACH COUNTY BY THE REAP ACT AS PASSED BY THE IOWA LEGISLATURE. TO ACCOMPLISH THE INTENT OF THE LEGISLATION, THE PLANS OF EACH COUNTY SHOULD ADDRESS THE LEGISLATIVE FINDINGS PRESENTED IN THE REAP ACT AND INCLUDE PLANS AND PROPOSALS TO IMPLEMENT THE STATE RESOURCE ENHANCEMENT POLICY STATED IN THE ACT. THE COMPLETED PLAN WILL PROVIDE A BASIS FOR SEEKING AND JUSTIFYING REAP GRANTS OF FINANCIAL ASSISTANCE AND FOR BUDGETING LOCAL FUNDS FOR RESOURCE ENHANCEMENT AND PROTECTION PROJECTS.

THE LEGISLATIVE FINDINGS CONTAINED IN THE REAP ACT ARE:

- * Iowa's society was built and sustained on the resources of air, soils, water, and a rich diversity of life. Iowa's future and well-being depend on these natural resources.
- * Many human activities have endangered Iowa's natural resources.
- * The state of Iowa has lost:
 - 99.9% of its prairies,
 - 98.0% of its wetlands,
 - 80.0% of its woodlands,
 - 50.0% of its topsoils,
 - and more than 100 species of wildlife,
 - since settlement in the early 1880's.
- * There has been a significant deterioration in the quality of Iowa's surface waters and groundwaters.
- * Detrimental effects from the losses of Iowa's natural resources are already apparent. Prevention of further losses are imperative.
- * The air, waters, soils, and biota of Iowa are interdependent and form a complex ecosystem.
- * Future Iowans have the right to inherit the state's ecosystem in a sustainable condition, without severe or irreparable damage caused by human activities.

THE STATE RESOURCE ENHANCEMENT POLICY DECLARED IN THE REAP ACT IS:

- * To protect Iowa's natural resource heritage of air, soils, waters, and wildlife for the benefit of present and future citizens.

- * To establish a long term, integrated program to wisely use and protect Iowa's resources, utilizing:
 - > acquisition and management of public lands,
 - > upgrading of park and preserve facilities,
 - > environmental education,
 - > monitoring,
 - > research,
 - > and other environmentally sound means.
- * To encourage Iowans to develop a conservation ethic.
- * To encourage the changes necessary in Iowans' activities to develop and preserve a rich and diverse natural environment.

THE PRIMARY TYPES OF ACTIVITIES INVOLVED IN IMPLEMENTING THE STATE RESOURCE ENHANCEMENT POLICY ARE:

- * Preservation
- * Protection
- * Restoration
- * Enhancement
- * Regulation
- * Acquisition
- * Development
- * Education
- * Monitoring
- * Research

SPECIFIC TYPES OF PROJECTS THAT MAY BE A PART OF A RESOURCE ENHANCEMENT AND PROTECTION PLAN INCLUDE:

- * Open space acquisition, protection, and development
- * Land easements
- * Resource stabilization and protection
- * Facilities repair and upgrading
- * Environmental education
- * Equipment acquisition
- * Soil and water enhancement
- * Reforestation
- * Woodland establishment, protection, and enhancement
- * Wildlife habitat preservation and enhancement
- * Protection of highly erodible soils
- * Clean water programs
- * Multi-purpose trails
- * Restroom facilities
- * Shelter houses
- * Picnic facilities
- * Acquisition, establishment, and maintenance of natural parks and preserves
- * Historical resource development

- * Development and implementation of integrated roadway vegetation plans
- * Prevention and clean up of litter in public areas
- * Protect surface and groundwater from contamination
- * Establishment of native grasses and forbs
- * Sinkhole management
- * Ag drainage well management
- * Streambank stabilization
- * Grass waterway establishment
- * Stream buffer strip establishment
- * Erosion control structure development

PROJECTS MAY BE PROPOSED AND IMPLEMENTED IN THE COUNTY BY:

- * Soil and Water Conservation District
- * County Board of Supervisors
- * County Conservation Board
- * City Councils
- * City Park Boards
- * Iowa City Riverfront Commission
- * School Districts
- * Incorporated Conservation Organizations
- * Trusts and Foundations
- * Corporations
- * Private Groups
- * Historical Organizations
- * Private Individuals

STATE AGENCIES MAY UNDERTAKE REAP FUNDED PROJECTS ON STATE LANDS WITHIN THE COUNTY. SUCH PROJECTS MAY WELL HAVE AN IMPACT ON THE COUNTY PLAN AND ON LOCAL PUBLIC AND PRIVATE PROJECTS. TO THE EXTENT THAT STATE AGENCY PROJECTS AFFECTING RESOURCES IN JOHNSON COUNTY ARE KNOWN, THOSE PROJECTS SHOULD BE ACKNOWLEDGED AND CONSIDERED IN THE COUNTY PLAN.

BACKGROUND INFORMATION SURVEY

SPECIFIC RESOURCE ENHANCEMENT AND PROTECTION PROBLEMS, PROJECTS OR NEEDS IDENTIFIED IN JOHNSON COUNTY BY REAP PLAN SURVEY RESPONDENTS:

GENERAL PROBLEMS OR NEEDS SUGGESTED BY SURVEY RESPONDENTS:

- Protection near natural areas, wetlands, prairies and timber
- Protection of surface and underground waters
- Environmental education
- Trails
- Preserving, interpreting, exhibiting our Iowa heritage
- Re-establishment of forestlands and wetlands
- Soil conservation

- Solid waste management
- Endangered species
- Perpetual care and maintenance expense of current resources
- Insufficient capital acquisition funds to continue acquisition and development policies
- River corridor preservation, protection and trail development
- Need additional open prairie habitats
- Begin progressive solid waste management programs
- Encourage alternatives to automobile transportation
- Community based energy conservation programs
- Expansion of business and residential development without concern for natural resources protection

SPECIFIC PROJECTS SUGGESTED BY SURVEY RESPONDENTS:

- Acquisition of waterfowl habitat area southwest of Iowa City
- Begin implementation of Governor's Environmental Education Conference priorities in Johnson County
- Inventory natural areas and sites of historic and scenic value in Johnson County
- Evaluate impact of Avenue of Saints Highway corridor
- Develop program of natural roadside vegetation maintenance and eliminate chemical controls
- Evaluate impact of septic system concentration around Reservoir/Lake McBride area
- Development of regional wildlife area between Iowa City and Cedar Rapids
- Acquisition of natural park area east of Tiffin in conjunction with Senior Housing and sewage treatment project
- Promote comprehensive curbside recycling program
- Study air quality issues in Johnson County
- Trails along river corridors
- River corridor land acquisition

PROBLEMS - PLANS - PROJECTS

Based upon the survey responses and input from JCREAP committee members, the problems, plans and projects presented on the following pages are proposed to constitute the 1990-1995 Johnson County Resource Enhancement and Protection Plan.

RESOURCE: SOILS

PROBLEMS: Topsoil erosion is occurring at a rate greater than natural replacement.

High quality croplands are being reduced by non-agricultural development.

Soils are being contaminated by construction debris, chemical applications, airborne pollutants, and leaking underground storage tanks.

PLANS: Reduce topsoil erosion to equal or less than natural replacement rate.

Discourage non-agricultural development of prime croplands.

Reduce soil pollution.

PROJECTS: Encourage terracing, filter strips, reforestation, windbreak planting, and other soil conservation measures.

Restrict higher density development to urban core areas.

Encourage higher standards of construction site maintenance and preservation of on-site resource assets.

Encourage minimum effective application of herbicides, pesticides, and fertilizers in both rural and urban areas. [See Water and Fauna].

Identify problem sites and develop plans for protecting adjacent soil and water areas from contamination from hazardous waste and pollutants. For example, leaking underground storage tanks should be removed.

RESOURCE: WATER

PROBLEMS: Water quality of streams, lakes and ground water has declined significantly. At times, use of public water supplies by some segments of the population could be detrimental to health.

PLANS: Improve water quality and reduce sources of detrimental elements in surface and ground water.

PROJECTS: Document the extent of water quality problems in Johnson county.

Encourage creation of filter strips, reforestation of slopes, terraces, and siltation basins to reduce and cleanse runoff and facilitate percolation of stormwater.

Encourage higher standards of sewage disposal in areas of rural development near bodies of surface water and over ground water channels.

Encourage protection and restoration of wetlands areas as natural filters for ground water, and acquisition where necessary to assure preservation.

Improve wastewater treatment in urban areas.

Plan new techniques for treating public water supplies.

Plan new techniques for treating stormwater.

Remove old underground storage tanks.

Encourage minimum effective application of herbicides, pesticides, and fertilizers in both rural and urban areas. (See Soils and Fauna).

RESOURCE: AIR

PROBLEMS: Air quality is declining.

Some industrial, institutional, and public operations have been identified as contributing or potentially contributing undesirable or potentially hazardous emissions to air in Johnson county.

Increased traffic volume and congestion is contributing to air pollution.

Increased wind erosion is occurring.

PLANS: Maintain or improve present levels of air quality, through 1995.

PROJECTS: Increased tree plantings along major traffic routes, using native varieties where appropriate.

Document present air quality levels and sources of potentially detrimental emissions.

Increased windbreak and natural screen plantings to reduce wind erosion.

Encourage alternate transportation means and improve traffic flows; e.g. bicycle trails.

Encourage preservation of mature trees where areas are to be developed.

RESOURCE: FLORA (VEGETATION)

PROBLEMS: Woodland and wetland areas have been and continue to be severely reduced by development and agricultural uses.

Prairie vegetation and wildflower areas are minimal and many plants are threatened by herbicide uses.

PLANS: Protect and preserve remaining woodlands, wetlands, prairie vegetation and wildflower areas.

Increase tree planting along water courses and prairie vegetation on marginal upland soils.

Utilize public right-of-ways and other non-developed open spaces to create areas of prairie vegetation and wildflower preserves.

PROJECTS: Protect and preserve remaining woodland and wetland areas within urban boundaries.

Protect and preserve remaining woodlands and wetlands along major water courses.

Protect and preserve a major woodland area in each quadrant of the county.

Restore or develop a large prairie area and expand existing prairie areas where appropriate.

Expand non-chemical roadside management practices.

Encourage tree planting in urban and rural areas.

Identify locations of rare or endangered species and protect them from development.

RESOURCE: FAUNA (WILDLIFE)

PROBLEMS: Urban development and agricultural cropping practices continue to reduce wildlife habitat.

Chemical application practices threaten aquatic life, birds and small mammals.

PLANS: Restore wildlife habitat in wetland, woodland and marginal soil areas.

PROJECTS: Identify extent of wildlife habitat problems and presence of rare or endangered species.

Encourage private owner preservation or creation of wildlife habitat on marginal lands.

Encourage minimum effective application of herbicides, pesticides, and fertilizers in both rural and urban areas. [See Soils and Water].

Utilize public open space for wildlife habitat protection and creation; for example, planting prairie vegetation along roadsides.

RESOURCE: OPEN ~~RE~~ SPACE

PROBLEMS: Usable accessible open space is being reduced as development expands into areas that formerly functioned as open space.

Public open space acquisition has not kept pace with population growth in some communities.

Additional open space is needed in urban areas to aid in offsetting the heat island effects of intensive urban development.

Some existing open space areas need minimal improvements to make the areas accessible and usable by the public.

PLANS: To make available additional accessible usable open space in reasonable proximity to areas of population concentration.

PROJECTS: As may be proposed...

IOWA DEPARTMENT OF NATURAL RESOURCES
RESOURCE ENHANCEMENT AND PROTECTION FUND ANALYSIS

COUNTY CONSERVATION ACCOUNT: ALLOCATION BY COUNTY

County	Total FY 1988 - FY 1990			Each Year FY 1991 - FY 2000		
	Pop Based Allocation	Per County	Total	Pop Based Allocation	Per County	Total
Adair	\$2,609	\$8,788	\$11,397	\$5,281	\$17,788	\$23,069
Adams	\$1,637	\$8,788	\$10,445	\$3,355	\$17,788	\$21,143
Allamakee	\$4,604	\$8,788	\$13,392	\$9,319	\$17,788	\$27,107
Appanoose	\$4,358	\$8,788	\$13,146	\$8,822	\$17,788	\$26,610
Audubon	\$2,394	\$8,788	\$11,182	\$4,846	\$17,788	\$22,634
Benton	\$8,998	\$8,788	\$15,786	\$14,165	\$17,788	\$31,952
Black Hawk	\$18,611	\$8,788	\$47,399	\$78,153	\$17,788	\$95,941
Boone	\$7,827	\$8,788	\$16,614	\$15,842	\$17,788	\$33,630
Bremer	\$7,213	\$8,788	\$16,001	\$14,599	\$17,788	\$32,387
Buchanan	\$8,599	\$8,788	\$15,387	\$13,357	\$17,788	\$31,145
Buena Vista**	\$6,261	\$8,788	\$15,049	\$12,674	\$17,788	\$30,461
Butler	\$5,034	\$8,788	\$13,821	\$10,189	\$17,788	\$27,976
Calhoun	\$3,714	\$8,788	\$12,502	\$7,517	\$17,788	\$25,305
Carroll	\$8,844	\$8,788	\$15,632	\$13,854	\$17,788	\$31,642
Cass	\$4,819	\$8,788	\$13,637	\$9,816	\$17,788	\$27,604
Cedar	\$5,586	\$8,788	\$14,374	\$11,307	\$17,788	\$29,095
Cerro Gordo	\$14,763	\$8,788	\$33,551	\$29,882	\$17,788	\$47,670
Cherokee	\$4,604	\$8,788	\$13,392	\$9,319	\$17,788	\$27,107
Chickasaw	\$4,481	\$8,788	\$13,269	\$9,070	\$17,788	\$26,858
Clarke	\$2,640	\$8,788	\$11,427	\$5,343	\$17,788	\$23,131
Clay	\$5,453	\$8,788	\$14,251	\$11,058	\$17,788	\$28,846
Clayton	\$6,261	\$8,788	\$15,049	\$12,674	\$17,788	\$30,461
Crawford	\$16,236	\$8,788	\$25,024	\$32,864	\$17,788	\$50,652
Dallas	\$5,647	\$8,788	\$14,435	\$11,431	\$17,788	\$29,219
Davis	\$9,146	\$8,788	\$17,934	\$18,513	\$17,788	\$36,301
Decatur	\$2,701	\$8,788	\$11,489	\$5,467	\$17,788	\$23,255
DeKalb	\$2,670	\$8,788	\$11,458	\$5,405	\$17,788	\$23,193
Delaware	\$5,709	\$8,788	\$14,497	\$11,555	\$17,788	\$29,343
Des Moines	\$13,566	\$8,788	\$22,354	\$27,459	\$17,788	\$45,247
Dickinson	\$4,604	\$8,788	\$13,392	\$9,319	\$17,788	\$27,107
Dubuque	\$27,838	\$8,788	\$36,626	\$56,348	\$17,788	\$74,135
Emmet	\$3,560	\$8,788	\$12,348	\$7,207	\$17,788	\$24,994
Fayette	\$7,090	\$8,788	\$15,878	\$14,351	\$17,788	\$32,139
Floyd	\$5,617	\$8,788	\$14,405	\$11,369	\$17,788	\$29,157
Franklin	\$3,744	\$8,788	\$12,532	\$7,579	\$17,788	\$25,367
Frederick	\$2,732	\$8,788	\$11,519	\$5,529	\$17,788	\$23,317
Grane	\$3,345	\$8,788	\$12,133	\$6,772	\$17,788	\$24,560
Grueney	\$4,021	\$8,788	\$12,809	\$8,138	\$17,788	\$25,926
Guthrie	\$3,499	\$8,788	\$12,287	\$7,082	\$17,788	\$24,870
Hamilton	\$5,248	\$8,788	\$14,036	\$10,623	\$17,788	\$28,411
Hancock	\$4,082	\$8,788	\$12,870	\$8,263	\$17,788	\$26,051
Hardin	\$6,231	\$8,788	\$15,018	\$12,611	\$17,788	\$30,399
Harrison	\$4,849	\$8,788	\$13,637	\$9,818	\$17,788	\$27,604
Henry	\$5,832	\$8,788	\$14,619	\$11,804	\$17,788	\$29,592
Howard	\$3,253	\$8,788	\$12,041	\$6,565	\$17,788	\$24,373
Humboldt	\$3,468	\$8,788	\$12,256	\$7,030	\$17,788	\$24,808
Ia	\$2,640	\$8,788	\$11,427	\$5,343	\$17,788	\$23,131
Iowa	\$4,635	\$8,788	\$13,422	\$9,381	\$17,788	\$27,169
Jackson	\$6,650	\$8,788	\$15,448	\$13,461	\$17,788	\$31,259

Jefferson	\$5,064	\$8,788	\$13,852	\$10,251	\$17,788	\$28,039
Johnson	\$28,334	\$8,788	\$37,122	\$53,003	\$17,788	\$70,891
Jones*	\$6,108	\$8,788	\$14,896	\$12,363	\$17,788	\$30,151
Kearkuk	\$3,683	\$8,788	\$12,471	\$7,455	\$17,788	\$25,243
Kossuth	\$4,108	\$8,788	\$12,896	\$12,363	\$17,788	\$30,151
Lee	\$12,522	\$8,788	\$21,310	\$25,347	\$17,788	\$43,135
Lincoln	\$52,054	\$8,788	\$60,842	\$105,364	\$17,788	\$122,152
Louis	\$3,652	\$8,788	\$12,440	\$7,393	\$17,788	\$25,181
Lucas	\$2,546	\$8,788	\$11,334	\$5,564	\$17,788	\$23,352
Lyon*	\$3,775	\$8,788	\$12,563	\$7,641	\$17,788	\$25,429
Madison	\$3,806	\$8,788	\$12,594	\$7,704	\$17,788	\$25,491
Manitowish	\$6,644	\$8,788	\$15,432	\$13,854	\$17,788	\$31,642
Marion	\$9,208	\$8,788	\$17,996	\$18,638	\$17,788	\$36,425
Martell	\$12,215	\$8,788	\$21,003	\$24,726	\$17,788	\$42,514
Mills	\$4,113	\$8,788	\$12,901	\$8,325	\$17,788	\$26,113
Monroe	\$3,560	\$8,788	\$12,343	\$7,207	\$17,788	\$24,994
Montgomery	\$3,223	\$8,788	\$12,011	\$6,522	\$17,788	\$24,311
Monroe	\$2,609	\$8,788	\$11,397	\$5,281	\$17,788	\$23,069
Muscatine	\$3,775	\$8,788	\$12,563	\$7,641	\$17,788	\$25,429
Muscatine	\$12,676	\$8,788	\$21,464	\$25,658	\$17,788	\$43,446
O'Brien	\$4,890	\$8,788	\$13,688	\$9,878	\$17,788	\$27,666
Oscada	\$2,394	\$8,788	\$11,182	\$4,846	\$17,788	\$22,634
Page	\$5,310	\$8,788	\$14,098	\$10,748	\$17,788	\$28,536
Palo Alto	\$3,468	\$8,788	\$12,256	\$7,030	\$17,788	\$24,808
Plymouth	\$7,428	\$8,788	\$16,215	\$15,034	\$17,788	\$32,822
Pocahontas	\$3,253	\$8,788	\$12,041	\$6,522	\$17,788	\$24,311
Polk	\$98,000	\$8,788	\$106,788	\$198,566	\$17,788	\$216,154
Pottawattamie	\$27,101	\$8,788	\$35,889	\$54,857	\$17,788	\$72,644
Poweshiek	\$5,709	\$8,788	\$14,497	\$11,555	\$17,788	\$29,343
Ringgold	\$1,668	\$8,788	\$10,476	\$2,417	\$17,788	\$21,205
Sac	\$3,929	\$8,788	\$12,716	\$7,952	\$17,788	\$25,740
Scott	\$47,910	\$8,788	\$56,698	\$98,977	\$17,788	\$114,765
Shelby	\$4,420	\$8,788	\$13,208	\$8,946	\$17,788	\$26,734
Sioux	\$9,238	\$8,788	\$18,026	\$18,700	\$17,788	\$36,488
Story	\$2,037	\$8,788	\$10,825	\$4,606	\$17,788	\$22,394
Tama	\$5,673	\$8,788	\$14,466	\$11,493	\$17,788	\$29,281
Taylor	\$2,333	\$8,788	\$11,120	\$4,722	\$17,788	\$22,509
Union	\$3,990	\$8,788	\$12,778	\$8,076	\$17,788	\$25,864
Van Buren	\$2,486	\$8,788	\$11,274	\$5,032	\$17,788	\$22,820
Wapello	\$11,448	\$8,788	\$20,236	\$23,173	\$17,788	\$40,961
Warren	\$11,049	\$8,788	\$19,837	\$22,365	\$17,788	\$40,153
Washington	\$6,046	\$8,788	\$14,834	\$12,239	\$17,788	\$30,027
Wayne	\$2,441	\$8,788	\$11,028	\$4,535	\$17,788	\$22,323
Webster	\$12,952	\$8,788	\$21,740	\$28,217	\$17,788	\$44,005
Winnebago	\$3,867	\$8,788	\$12,655	\$7,828	\$17,788	\$25,616
Winnepeg	\$6,660	\$8,788	\$15,448	\$13,481	\$17,788	\$31,269
Woodbury	\$29,966	\$8,788	\$38,774	\$60,656	\$17,788	\$78,464
Worth	\$2,870	\$8,788	\$11,658	\$5,405	\$17,788	\$23,193
Wright	\$4,542	\$8,788	\$13,330	\$9,195	\$17,788	\$26,982
TOTAL	\$870,000	\$870,000	\$1,740,000	\$1,761,000	\$1,761,000	\$3,522,000

* Authorized to borrow \$50,000 from competitive grant only for bonded debt repaid to be repaid from above allocations.
** Authorized to borrow \$15,000 from competitive grant only for bonded debt repaid to be repaid from above allocations.

#26,334 - 8788 - 35,122

WCH

DNR GENERAL FUND APPROPRIATIONS AS A PERCENT OF TOTAL STATE OF IOWA GENERAL FUND RECEIPTS

